

DiPiro's Pharmacotherapy Handbook, 13th Edition >

Chapter 65: Anxiety Disorders

INTRODUCTION

- *Anxiety disorders* like generalized anxiety disorder (GAD) and panic disorder (PD) have prominent features of anxiety and avoidance that are irrational or that impair functioning. In posttraumatic stress disorder (PTSD), there is previous exposure to trauma and the occurrence of intrusive, avoidant, and hyperarousal symptoms.

GENERALIZED ANXIETY DISORDER: CLINICAL PRESENTATION

- Psychological and cognitive symptoms of GAD include excessive anxiety, uncontrollable worries, feeling on edge, and difficulty concentrating or mind going blank.
- Physical symptoms include restlessness, fatigue, muscle tension, sleep disturbance, and irritability.
- GAD diagnosis requires excessive anxiety and worry on most days for at least 6 months, with at least three physical symptoms. It must cause significant distress or impairment and not be due to a substance or another medical condition.
- Females are twice as likely as males to have GAD. It typically begins gradually around age 21 and follows a chronic course with multiple exacerbations and remissions.

TREATMENT

- Goals of Treatment: To reduce symptom severity, duration, and frequency and to improve functioning. Long-term aims include minimal or no anxiety symptoms, no functional impairment, recurrence prevention, and improved quality of life.

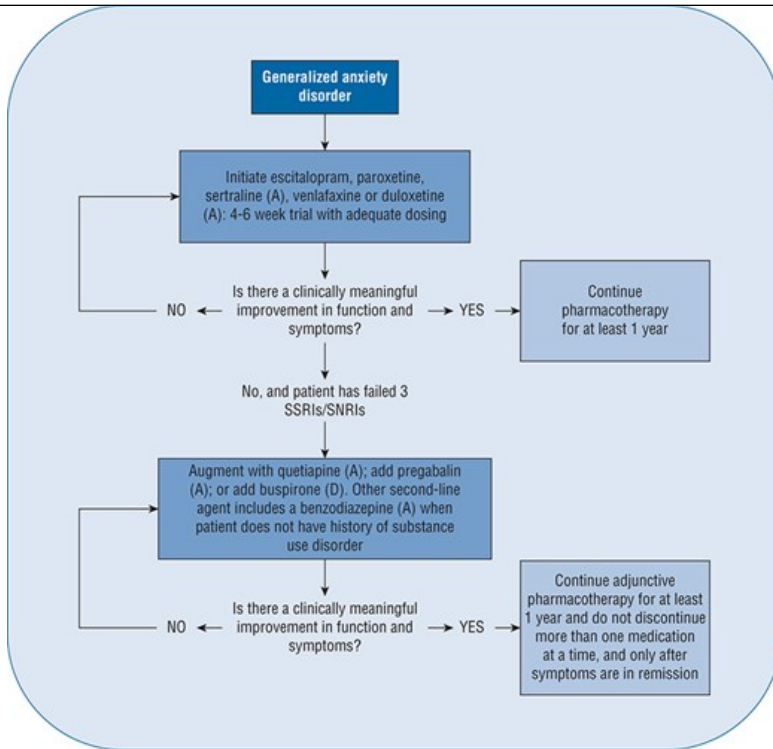
NONPHARMACOLOGIC THERAPY

- Nonpharmacologic methods include psychotherapy, counseling, stress management, psychoeducation, meditation, and exercise. Patients should ideally undergo psychological therapy, with or without medication. Cognitive behavioral therapy (CBT), though not widely available, is the most effective. Patients should avoid [caffeine](#), [nicotine](#), stimulants, excessive [alcohol](#), and diet pills.
- A descriptive flowchart with recommendations for the pharmacologic management of GAD is shown in [Fig. 65-1](#).

Figure 65-1

Algorithm for the pharmacotherapy of generalized anxiety disorder (GAD) from the World Federation of Societies of Biological Psychiatry (WFSBP). Strength of recommendations: (A) strong evidence for the intervention; (B) limited evidence for the intervention; (D) no evidence.





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PHARMACOLOGIC THERAPY

- Pharmacologic choices for GAD and PD are shown in [Table 65-1](#), and nonbenzodiazepine antianxiety agents for GAD and their dosing are shown in [Table 65-2](#).

Table 65-1

Medications of Choice for Anxiety Disorders

Anxiety Disorder	First-Line Medications	Second-Line Medications	Alternatives
Generalized anxiety disorder	Duloxetine Escitalopram Paroxetine Sertraline Venlafaxine XR	Benzodiazepines Buspirone Imipramine Pregabalin	Hydroxyzine Quetiapine
Panic disorder	SSRIs Venlafaxine XR	Alprazolam Citalopram Clomipramine Clonazepam Imipramine	Phenelzine

SSRI, selective serotonin reuptake inhibitor; XR, extended-release.

Table 65-2

Nonbenzodiazepine Antianxiety Agents for Generalized Anxiety Disorder

Medications	Initial Dose (mg/day)	Usual Range (mg/day) ^a
Duloxetine	30 or 60	60–120
Escitalopram	10	10–20
Imipramine	50	75–200
Paroxetine	20	20–50 ^b
Sertraline	50	50–200
Venlafaxine XR	37.5 or 75	75–225
Vilazodone	10	20–40 ^c
Vortioxetine	5	5–20
Buspirone	15	15–60 ^d
Hydroxyzine	100–200	200–400 ^e
Pregabalin	150	150–600 ^f
Quetiapine XR	50	150–300

XR, extended-release.

^aOlder patients are usually treated with approximately one-half of the dose listed.

^bAvoid in pregnancy.

^cDuring concomitant use of a strong CYP3A4 inhibitor (eg, itraconazole, clarithromycin, voriconazole), the dose should not exceed 20 mg daily.

^dNo dosage adjustment is required in older patients.

^eFDA approved for children with anxiety and tension.

^fDosage adjustment required in renal impairment.

Antidepressants

- Antidepressants, particularly SSRIs (eg, escitalopram, paroxetine, sertraline) and SNRIs (eg, venlafaxine XR, duloxetine), are effective for both acute and long-term GAD management, especially with depressive symptoms ([Table 65-2](#)). An 8- to 12-week trial can yield response rates of 60%–68% and remission rates around 30%. **Venlafaxine, escitalopram, paroxetine, duloxetine, and quetiapine** are more likely to achieve remission, while **sertraline** may be best tolerated. See [Chapter 66](#) for more on antidepressants.

- Common adverse medication effects and monitoring parameters are shown in [Table 65-3](#).
- Small initial doses may be needed for the first week to prevent transient increased anxiety, known as jitteriness syndrome.
- All antidepressants carry a black box warning about suicidal thoughts and behaviors in individuals under 25. They recommend specific monitoring (refer to FDA labeling or website).
- Guidelines recommend **fluoxetine**, sertraline, or **citalopram** for pregnant persons. However, neonates may experience jitteriness, myoclonus, and irritability, and paroxetine should be avoided due to cardiovascular malformation risk.

TABLE 65-3

Monitoring of Adverse Medication Effects

Adverse Medication Reaction	Monitoring Parameter	Comments
SSRIs		
Jitteriness syndrome	Patient interview	
Suicidality	Patient interview	Monitor weekly in the first weeks for patients under 25 or with comorbid depression
Nausea, diarrhea	Patient interview	Typically transient
Headache	Patient interview	Typically transient
Weight gain	Body weight, BMI, waist circumference	Paroxetine may be more likely to cause weight gain
Sexual dysfunction	Patient interview	Significant reason for nonadherence
Hyponatremia	Basic metabolic panel	Monitor at baseline and periodically; check more often for high-risk, especially over 65
Thrombocytopenia	Complete blood count	Reported with citalopram
Teratogenicity	Pregnancy test at baseline	Avoid paroxetine in pregnancy
QT prolongation	ECG	Before starting citalopram, consider ECG/QT check in patients with cardiac disease
Discontinuation syndrome	Patient interview	Avoid abrupt discontinuation in all but fluoxetine
SNRIs		
Jitteriness syndrome	Patient interview	
Suicidality	Patient interview	Monitor weekly in the first weeks for patients under 25 or with comorbid depression
Nausea, diarrhea	Patient interview	Typically transient
Headache	Patient interview	Typically transient

Elevated blood pressure	Blood pressure	Monitor blood pressure at start and during treatment
Sexual dysfunction	Patient interview	Significant reason for nonadherence
Discontinuation syndrome	Patient interview	Avoid abrupt discontinuation
TCAs		
Jitteriness syndrome	Patient interview	
Suicidality	Patient interview	Monitor weekly in the first weeks for patients under 25 or with comorbid depression
Anticholinergic effects	Patient interview	Contraindicated with narrow-angle glaucoma, prostatic hypertrophy, and urinary retention
Weight gain	Body weight, BMI, waist circumference	
Sexual dysfunction	Patient interview	Significant reason for nonadherence
Sedation	Patient interview	Administer dosage at bedtime when feasible
Arrhythmia	ECG	At baseline and periodically in children and patients over 40
Orthostatic hypotension	Blood pressure with position changes	
Cholinergic rebound	Patient interview	Avoid abrupt discontinuation; taper doses
Benzodiazepines		
Drowsiness, fatigue	Patient interview	Avoid operating large machinery; sedation tolerance develops with repeated doses
Anterograde amnesia and memory impairment	Patient interview	Anterograde amnesia risk increases with alcohol intake
Use disorder	Patient interview; prescription monitoring program	Monitor for early refills or escalation of dosage
Withdrawal symptoms	Physical examination; patient interview	Taper doses on discontinuation
Respiratory depression	Respiratory rate	Avoid administering with other CNS depressants (ie, opioids, alcohol)
Psychomotor impairment	Physical examination	Increased risk of falls
Paradoxical disinhibition	Physical examination; family report	Older adults and children may experience increased anxiety, irritability, or agitation
Buspirone		
Nausea, abdominal pain	Patient interview	Typically transient

Drowsiness, dizziness

Patient interview

Typically transient

BMI, body mass index; CNS, central nervous system; ECG, electrocardiogram; SNRI, serotonin–norepinephrine reuptake inhibitor; SSRIs, selective serotonin reuptake inhibitors; TCAs, tricyclic antidepressants.

Benzodiazepines

- All benzodiazepines (BZDs) possess anxiolytic properties, although not all are FDA-approved for the treatment of GAD.
- BZDs are the most effective and frequently prescribed treatment for acute anxiety ([Table 65-4](#)). About 65%–75% of GAD patients show marked to moderate response, mostly in the first 2 weeks. These treatments are more effective for somatic and autonomic symptoms, while antidepressants better address psychic symptoms like apprehension and worry.
- Doses must be individualized. Older patients are more sensitive to BZDs and may experience falls.
- The most common adverse effect is CNS depression, but tolerance usually develops. Other effects include disorientation, psychomotor impairment, confusion, aggression, excitement, ataxia, and anterograde amnesia (see [Table 65-3](#)).
- Start with low doses, and adjust weekly (see [Table 65-4](#)). BZDs should follow a regular dosing regimen and not be used as needed for anxiety disorders.
- Acute treatment should be 2–4 weeks. Manage persistent symptoms with antidepressants.
- Long half-life BZDs can be taken once daily at bedtime, offering nighttime hypnotic and next-day anxiolytic effects.
- Use low doses of short-elimination half-life agents in older patients.
- **Diazepam** and **clonazepam** have high lipophilicity and are rapidly absorbed and distributed into the CNS. They have rapid antianxiety effects, but a shorter duration of effect after a single dose than would be predicted based on half-life, as they are rapidly distributed to the periphery.
- **Lorazepam** and **oxazepam** are less lipophilic, resulting in a slower onset but longer duration. They are not recommended for immediate anxiety relief.
- Avoid intramuscular (IM) **diazepam** and IM **chlordiazepoxide** due to variable absorption. IM **lorazepam** provides rapid, complete absorption.
- Several BZDs convert to desmethyldiazepam, which has a long half-life and can accumulate. Intermediate- or short-acting BZDs are preferred for older patients and those with liver disorders due to minimal accumulation and quick steady-state achievement within 1–3 days.
- Combining BZDs with **alcohol** or other CNS depressants may be fatal.
- Nefazodone, **ritonavir**, or **ketoconazole** (CYP3A4 inhibitors) can raise **alprazolam** and **diazepam** levels. CYP3A4 inducers (eg, **carbamazepine**, St. John's wort) can lower BZD levels. Inhibitors or inducers of CYP2C19 (eg, fluoxetine, fluvoxamine, **omeprazole**) or *N*-acetyltransferase 2 can affect the metabolism of **diazepam** and **clonazepam**.
- Consult the literature for more information on BZD interactions.
- BZD use during pregnancy can cause teratogenic effects like cleft lip, “floppy baby syndrome,” and neonatal withdrawal; antidepressants are preferred. If necessary, **diazepam** and **chlordiazepoxide** may be options. In breastfed infants, BZDs can cause sedation, lethargy, and weight loss.

Table 65-4

Benzodiazepine Antianxiety Medications

Medication	Approved Dosage Range (mg/day)	Maximum Dosage for Older Patients (mg/day)	Approximate Equivalent Dose (mg)
Alprazolam ^a	0.75–4	2	0.5
	1–10 (XR form) ^b		
Chlordiazepoxide	25–400	40	10
Clonazepam	1–4 ^b	3	0.25–0.5
Clorazepate	7.5–60	30	7.5
Diazepam	2–40	20	5
Lorazepam ^c	0.5–10	3	1
Oxazepam ^c	30–120	60	30

XR, extended-release.

^aAssociated with interdose rebound anxiety.

^bDose for panic disorder.

^cPreferred in older adults.

Benzodiazepine Discontinuation

- Abrupt BZD discontinuation can lead to: (1) rebound symptoms—immediate, temporary return of original symptoms with greater intensity; (2) recurrence—return of original symptoms at baseline intensity; or (3) withdrawal—new symptoms and worsening of existing symptoms.
- Withdrawal symptoms begin 24–48 hours after stopping short half-life BZDs and 3–8 days after stopping long half-life ones.
- Discontinuation strategies include:
 - ✓ Reduce dosage by 25% per week if initial therapy exceeded 8 weeks. If withdrawal symptoms appear, decrease by 25% every 2 weeks. For BZD use over a year, taper slowly over 2–4 months.
- Adjunctive use of **pregabalin** can help to reduce withdrawal symptoms during the BZD taper.

Physical Dependence, Withdrawal, and Tolerance

- The FDA requires boxed warnings for all BZDs, highlighting risks of misuse, addiction, dependence, and withdrawal.
- BZD physical dependence is indicated by withdrawal symptoms (eg, anxiety, insomnia, agitation, nausea, depression, hallucinations, seizures) after abrupt discontinuation.

- Avoid prescribing BZDs to individuals with a history of substance use disorder. Those with GAD and PD are at high risk for misuse and dependence due to the chronic nature of these illnesses.

Buspirone

- **Buspirone** is a 5-HT_{1A} partial agonist without antiseizure, muscle relaxant, sedative, motor impairment, or dependence effects.
- It is a second-line GAD treatment due to delayed onset and inconsistent long-term efficacy. It is suitable for patients who fail other treatments or have a history of substance use. It does not offer rapid or “as-needed” relief.
- Buspirone can be titrated by 5 mg/day every 2 or 3 days as needed.
- Anxiolytic effects begin in 2 or more weeks, with maximum benefit in 4–6 weeks. Psychic symptoms improve before somatic ones.
- It may be less effective in patients with previous BZD use.
- Dosage and adverse medication effects are shown in **Tables 65-2 and 65-3**.
- Buspirone can raise blood pressure in patients on monoamine oxidase inhibitors.
- Verapamil, **itraconazole**, and fluvoxamine can increase buspirone levels via CYP3A4 inhibition, while **rifampin** reduces buspirone tenfold.

Alternative Pharmacotherapy

- **Hydroxyzine** is considered a second-line agent.
- **Pregabalin** shows anxiolytic effects similar to those of **lorazepam**, **alprazolam**, and venlafaxine in acute trials. Common adverse effects include sedation and dizziness.
- **Quetiapine** XR 150 mg/day is more effective than placebo and as effective as **paroxetine** 20 mg/day and **escitalopram** 10 mg/day, with quicker onset. It is not FDA-approved for GAD, and long-term risks are unknown.

EVALUATION OF THERAPEUTIC OUTCOMES

- Initially, monitor every 2 weeks for symptom reduction, functional improvement, and adverse effects. Use the Hamilton Rating Scale for Anxiety (HAM-A) or Sheehan Disability Scale to assess response.
- Treatment resistance is diagnosed after poor or no response to two different antidepressants. If inadequate response occurs, consider increasing the dose, augmenting, or switching agents. If these fail, check for additional symptoms, nonadherence, substance use disorder, other illnesses, and suicidal thoughts.

PANIC DISORDER: CLINICAL PRESENTATION

- Psychological symptoms include depersonalization (detachment from oneself), derealization (detachment from the environment), and fear of losing control or dying.
- Physical symptoms include abdominal distress, chest pain, chills, dizziness, choking feeling, heart sensations, nausea, palpitations, shortness of breath, sweating, tachycardia, and trembling.
- Recurrent unexpected panic attacks, with at least one followed by a month of either persistent worry about more attacks or maladaptive behavior changes related to the attacks.
- During an attack, at least four symptoms must accompany intense fear or discomfort. Symptoms peak within 10 minutes and typically last 20–30 minutes.

- Up to 50% of PD patients develop agoraphobia, characterized by fear of situations where escape is difficult (eg, crowded places). They may become homebound.

TREATMENT

- Goals of Treatment: Complete resolution of panic attacks, reduced anticipatory anxiety, no phobic avoidance, and no functional impairment.

NONPHARMACOLOGIC THERAPY

- CBT leads to short-term improvement in 80%–90% of patients and 6-month improvement in 75%. Combining psychosocial treatment with medication may reduce relapse risk after stopping medication.
- Educate patients to avoid **caffeine**, **nicotine**, **alcohol**, stimulants, and substance misuse. Aerobic exercise may benefit those with PD.

PHARMACOLOGIC THERAPY

- SSRIs or **venlafaxine XR** are first-line agents (**Table 65-5**), but BZDs (second-line agents) are used commonly. **Imipramine** is second line. An algorithm for pharmacologic therapy of PD is shown in **Fig. 65-2**.
- For older patients and youth, antidepressants, especially SSRIs, are preferred; BZDs are second-line due to disinhibition risks.
- The acute treatment phase with SSRIs usually lasts 1–3 months. Change therapy if no response after 6–8 weeks at an adequate dose. BZD acute phase lasts about 1 month.
- Patients are typically treated for 12–24 months before attempting discontinuation over 4–6 months. Many need long-term therapy.

Table 65-5

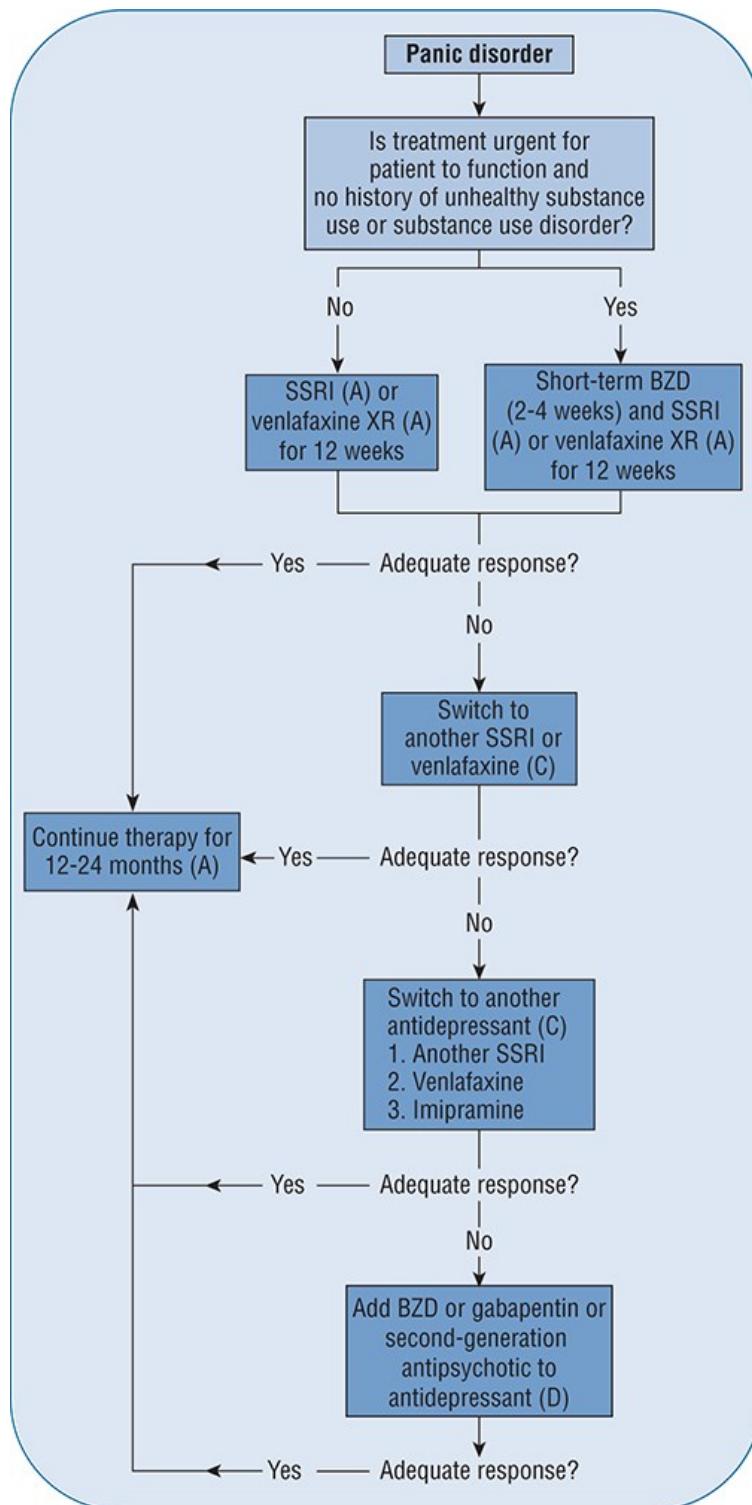
Medications Used in the Treatment of Panic Disorder

Class/Medication	Starting Dose (mg/day)	Antipanic Dosage Range (mg)
SSRIs		
Citalopram	10	20–40
Escitalopram	5	10–20
Fluoxetine	5	10–30
Fluvoxamine	25	100–300
Paroxetine	10	20–60
	12.5	25–75
Sertraline	25	50–200
SNRI		
Venlafaxine XR	37.5	75–225
Benzodiazepines		
Alprazolam	0.25 TID	4–10
	0.5–1	1–10
Clonazepam	0.25 QD or BID	1–4
Diazepam	2–5 mg TID	5–20
Lorazepam	0.5–1 TID	2–8
TCA		
Imipramine	10	75–250
MAOI		
Phenelzine	15	45–90

BID, twice daily; CR, controlled release; MAOI, monoamine oxidase inhibitor; QD, once daily; SNRI, serotonin-norepinephrine reuptake inhibitor; SSRIs, selective serotonin reuptake inhibitors; TCA, tricyclic antidepressant; TID, three times daily; XR, extended release.

Figure 65-2

Algorithm for the pharmacotherapy of panic disorder. Strength of recommendations: A, directly based on category I evidence (ie, meta-analysis of randomized controlled trials [RCT] or at least one RCT); C, directly based on category III evidence (ie, nonexperimental descriptive studies); D, directly based on category IV evidence (ie, expert committee reports or opinions and/or clinical experience of respected authorities). BZD, benzodiazepine; SSRI, selective serotonin reuptake inhibitor.



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Antidepressants

- **Citalopram** use is limited by QT prolongation.
- Stimulatory effects like anxiety and insomnia from TCAs and SSRIs can affect adherence and dose escalation. Start with low doses and titrate slowly to minimize these effects (see [Table 65-5](#)).
- Imipramine blocks panic attacks in 75% of patients within 4 weeks, but reducing anticipatory anxiety and phobic avoidance takes 8–12 weeks.
- One-quarter of PD patients stop TCAs due to adverse effects.
- SSRIs stop panic attacks in 60%–80% of patients within 4 weeks, though some need 8–12 weeks.
- Venlafaxine XR is more effective than placebo and similar to **paroxetine** in relieving panic attacks, anxiety, fear, and avoidance.

Benzodiazepines

- BZDs are second-line for PD unless rapid response is needed. Avoid BZDs alone in those with depression or substance use history. They are often combined with antidepressants in the first 4–6 weeks for faster response.
- Relapse rates of 50% or more are common, even with slow tapering.
- **Alprazolam** and **clonazepam** are preferred BZDs for PD, with response in 1–2 weeks. Using extended-release versions prevents breakthrough symptoms.
 - ✓ Regular dosing prevents panic attacks instead of reducing symptoms during an attack.
 - ✓ Start **clonazepam** at 0.25 mg once or twice daily, increasing by 0.25–0.5 mg every 3 days, up to 4 mg/day if needed.
 - ✓ Start **alprazolam** at 0.25 mg three times daily (or 0.5 mg once daily for extended-release), increasing slowly over weeks. Most need 3–6 mg/day.

EVALUATION OF THERAPEUTIC OUTCOMES

- Initially evaluate PD patients every 1–2 weeks to adjust dosing and monitor side effects. Once stable, schedule visits every 2 months. Use the Panic Disorder Severity Scale (with a remission goal of three or less with no or mild agoraphobic avoidance, anxiety, disability, or depressive symptoms) or the Sheehan Disability Scale (with a goal of less than or equal to one on each item) to measure disability. Increase appointment frequency during medication discontinuation.

POSTTRAUMATIC STRESS DISORDER: CLINICAL PRESENTATION

- In adults and children over 6, exposure to actual or threatened death, serious injury, or sexual violence can occur directly, by witnessing it, learning it happened to someone close, or repeated exposure to details.
- Duration of intrusive, avoidance, alterations in thinking and mood, and hyperarousal symptoms ([Table 65-6](#)) must persist for over a month, causing significant distress or impairment, including one intrusive symptom, one avoidance symptom, two negative mood/thinking alterations, and two increased arousal symptoms.
- PTSD often co-occurs with mood, anxiety, and substance use disorders, increasing the risk of suicide attempts.

Table 65-6

Clinical Presentation of Posttraumatic Stress Disorder

Intrusion Symptoms	
• Recurrent, intrusive distressing memories of the trauma • Recurrent, disturbing dreams of the event	• Feeling that the traumatic event is recurring (eg, dissociative flashbacks) • Physiologic reaction to or psychological distress from reminders of the trauma
Avoidance Symptoms	
• Avoidance of conversations, thoughts, or feelings about the trauma	• Avoidance of people, places, or activities that are reminders of the event
Persistent Negative Alterations in Thinking and Mood	
• Inability to recall an important aspect of the trauma • Anhedonia and restricted • Estrangement from others • Restricted affect	• Negative beliefs about oneself • Distorted beliefs causing one to blame others or themselves for the trauma • Negative mood state
Hyperarousal Symptoms	
• Decreased concentration and easily startled • Easily startled • Self-destructive behavior	• Hypervigilance • Insomnia • Irritability or anger outbursts
Specifiers	
• Dissociative symptoms: depersonalization or derealization	• With delayed expression: full criteria are not met until at least 6 months posttrauma

TREATMENT

- **Goals of Treatment:** Reduction in core symptoms, disability, and comorbidity and improved quality of life.

NONPHARMACOLOGIC THERAPY

- Psychotherapies include stress management, cognitive processing therapy, eye movement desensitization and reprocessing, and psychoeducation. Guidelines emphasize individual manualized trauma-focused therapies.
- Short courses of trauma-focused CBT soon after trauma can help prevent PTSD.
- Start treatment if symptoms persist for 3–4 weeks with social or occupational impairment; combine psychoeducation, psychosocial support, and pharmacotherapy.

PHARMACOLOGIC THERAPY

- **Figure 65-3** shows an algorithm for the pharmacotherapy of PTSD.
- The SSRIs and venlafaxine are first line for PTSD (**Table 65-7**). The TCAs and **phenelzine** are also effective, but adverse effects limit their use.
- **Sertraline** and **paroxetine** are approved for acute PTSD treatment; sertraline is also approved for long-term management. Long-term SSRI use (9–12 months) effectively prevents relapse.
- In a 12-week trial, **venlafaxine XR** reduced avoidance/numbing and hyperarousal, while sertraline improved all PTSD symptom clusters.
- **Mirtazapine**, amitriptyline, and imipramine are second-line therapies and phenelzine and **nefazodone** are third-line agents. **Bupropion** is not recommended.
- Start SSRIs at a low dose and slowly increase to antidepressant levels. The acute treatment phase lasts 8–12 weeks.
- In the continuation phase, medication dosages may vary as symptoms continue to improve.
- Patients who respond should continue treatment for at least 12 months. Taper medications slowly over a month or more to minimize relapse risk.
- **Prazosin**, at 1–25 mg daily, can help some PTSD patients, especially with nightmares and insomnia.
- **α_1 -adrenergic antagonists, mood stabilizers, and antiseizure medications** may be used as augmenting agents in partial responders. Second-generation antipsychotics (**risperidone, olanzapine, quetiapine**) are also augmenting agents and may be useful for intrusive symptoms.

Table 65-7

Dosing of Antidepressants in the Treatment of PTSD

Medication	Initial Dose (mg/day)	Usual Range (mg/day)
SSRIs		
Fluoxetine ^a	10	10–80 ^b
Paroxetine ^a	10–20	20–50; max 60 mg/day ^c
Sertraline ^a	25	50–100; max 200 mg/day ^c
Other Agents		
Amitriptyline ^a	25 or 50	75–200 ^b
Imipramine ^a	25 or 50	75–200 ^b
Mirtazapine ^a	15 ^d	30–60 ^b
Phenelzine ^a	15 or 30 ^d	45–90 ^b
Venlafaxine extended-release ^a	37.5	75–225 ^b

PTSD, posttraumatic stress disorder; SSRIs, selective serotonin reuptake inhibitors.

^aAvailable generically.

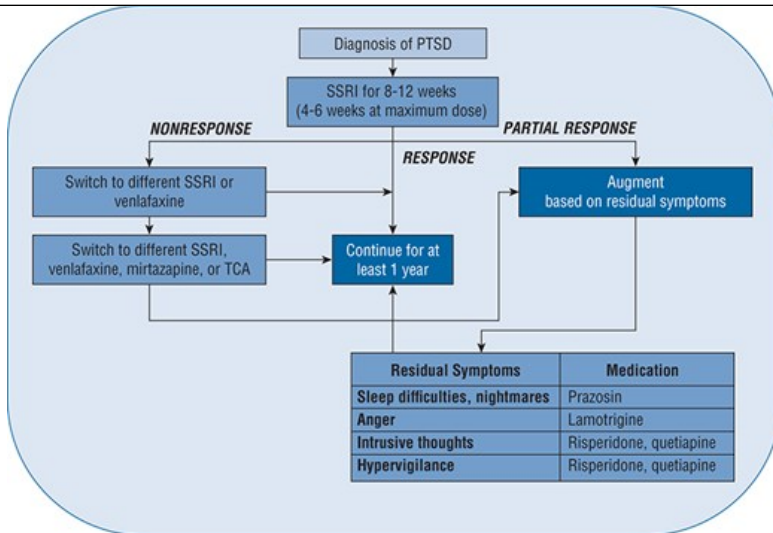
^bDosage used in clinical trials but not FDA-approved.

^cDosage is FDA-approved.

^dGiven at night.

Figure 65-3

Algorithm for the pharmacotherapy of posttraumatic stress disorder (PTSD). (SSRI, selective serotonin reuptake inhibitor; TCA, tricyclic antidepressant.)



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EVALUATION OF THERAPEUTIC OUTCOMES

- See patients frequently for the first 3 months, then monthly for the next 3–6 months. From months 6–12, schedule visits every 2 months. Continue treatment for at least 12 months for responders.
- Monitor symptom response, suicidal ideation, disability, adverse effects, and adherence. Use the PTSD Checklist for DSM-5 (PCL-5) or Clinician-Administered PTSD Scale (CAPS) to assess severity.

See [Chapter 94](#), *Generalized Anxiety Disorder, Panic, and Social Anxiety Disorder*, authored by Sarah T. Thomason and Cynthia K. Kirkwood, and [Chapter 95](#), *Posttraumatic Stress Disorder and Obsessive-Compulsive Disorder*, authored by Kristen N. Gardner, and Jolene R. Bostwick, for a more detailed discussion of these topics.